

AMENDMENTS TO THE CLAIMS

1. (currently amended) A method of sampling for a presence of fragile whisker-like metallic particulates in a data center comprising:

- (a) providing a tool capable of capturing and retaining the whisker-like metallic particulates in their fragile condition including a whisker-like geometry;
- (b) locating a surface of the data center where metallic particulates may be present; and
- (c) extracting from the surface any whisker-like metallic particulates present in substantially their fragile condition; and in a manner enabling characterization of the whisker-like geometry.

2. (original) A method as in claim 1 wherein the tool comprises an adhesive portion for extracting the whisker-like metallic particulates.

3. (original) A method as in claim 2 wherein the adhesive portion is a conductive adhesive.

4. (original) A method as in claim 3 wherein the conductive adhesive is a carbon conductive material.

5. (original) A method as in claim 2 wherein the step of extracting is carried out by pressing the adhesive portion on the surface.

6. (original) A method as in claim 1 wherein the step of extracting further comprises sampling a density of the whisker-like metallic particulates over a predetermined surface area.

7. (original) A method as in claim 1 further comprising the step of recording a location of the surface.

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8. (original) A method as in claim 1 further comprising the step of storing a sample such that the sample is protected from substantial contamination.
9. (original) A method as in claim 8 wherein the sample is stored in an enclosure such that the adhesive portion does not contact the enclosure.
10. (original) A method as in claim 2 wherein the tool is modular and the adhesive portion is removable from a handle portion.
11. (original) A method as in claim 1 wherein the fragile whisker-like metallic particulates are selected from the group consisting of zinc whiskers, cadmium whiskers, tin whiskers, and aluminum whiskers.
12. (currently amended) A method as in claim 1 further comprising the steps of:
- (a) locating a second surface of the data center wherein whisker-like metallic particulates may be present;
 - (b) providing a second tool capable of capturing and retaining the whisker-like metallic particulates in their fragile condition including a whisker-like geometry; and
 - (c) extracting from the second surface any whisker-like metallic particulates present in substantially their fragile condition and in a manner enabling characterization of the whisker-like geometry.
13. (original) A method as in claim 1 wherein the surface is on a floor tile.
14. (original) A method as in claim 13 wherein the step of extracting is from a bottom side of the floor tile.

15. (currently amended) A method for discovering a presence of an undesired whisker-like metallic particulate in a data center comprising:

- (a) locating a surface of the data center where the presence of a whisker-like metallic particulate having a whisker-like geometry is suspected;
- (b) extracting any whisker-like metallic particulate that may be present on the surface onto an adhesive intermediate substrate in a manner enabling characterization of the whisker-like geometry; and
- (c) confirming whether or not any whisker-like metallic particulates are present on the adhesive intermediate substrate.

16. (original) A method as in claim 15 wherein the step of extracting any whisker-like metallic particulates is done such that the whisker-like metallic particulates are substantially retained in their fragile condition.

17. (original) A method as in claim 15 wherein the adhesive intermediate substrate is conductive.

18. (original) A method as in claim 17 wherein the intermediate substrate comprises conductive carbon.

19. (original) A method as in claim 17 wherein the step of confirming whether or not any whisker-like metallic particulates are present is done with an electron microscope.

20. (original) A method as in claim 19 wherein the electron microscope is selected from the group consisting of a scanning electron microscope, a field emission electron microscope, and a transmission electron microscope.

21. (original) A method as in claim 15 wherein the whisker-like metallic particulates are selected from the group consisting of zinc whiskers, tin whiskers, cadmium whiskers, aluminum whiskers, and combinations thereof.

22. (original) A method as in claim 15 wherein the step of confirming whether or not any whisker-like metallic particulates are present further comprises the step of characterizing any whisker-like metallic particulates present with respect to geometry, surface properties, and density.

23. (original) A method as in claim 15 further comprising the step of characterizing the whisker-like metallic particulates using energy dispersive spectroscopy (EDS).